

Review

General comment:

The paper makes a significant contribution to scientific progress in analysis and data regard to WES scope. Main objective of the paper is to find limits of operating parameters in the pitch bearing with regards to wear which is to some extent new concept and has not studied extensively.

The paper did a study on the pitching operating parameter with consideration of sufficient cases. The test case is a bearing that is used in multi-megawatt wind turbine which is beneficial to apply in large wind turbine. The experiment set-up, test rig and the procedure are described thoroughly. Moreover, the results are presented quite in-depth.

There are some general notes as following:

- The relation between wear and torque is not established sufficiently.
- Some related previous work such as Yang et al.¹ considered wear volume as a wear index. It would be beneficial to express the priority of the wear index in this study compared to previous work such as Yang et. al.
- The paper doesn't clearly specify the wear marks happen in which rings (inner or outer) and the reason and discussion on it.
- Mesh independency of the finite element results are not stated.
- In the finite element modeling, tolerances and internal dimensions between the bearing rows are not considered. It is recommended to put some notes about the reason of not considering in the respective section.

Specific comment:

- Most frequent resulting moment according to Figure 5 is less than 2.0 MNm. Clarified the sentence "**A frequently resulting moment is 2.5 MNm**" in line 174.
- In line 88 there are repeated "**to**", and one should be cleared.

¹ Feng Yang, Huang Xiaodiao, Chen Jie, Wang Hua, Hong Rongjing "Reliability-based residual life prediction of large-size low-speed slewing bearings", Mechanism and Machine Theory 81 (2014) 94–106